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Goddard Space Flight Center

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Inside Wallops

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SeaWiFS Completes a Year of Remarkable Earth Observation's

For the first time in history, NASA is releasing dramatic images documenting the Earth's changing biology, on land and in the oceans, as observed from space for one continuous year.

The changing seasons of life, the "pulse of the planet," are being monitored by the Sea-viewing Wide Field-of-view Sensor (SeaWiFS), which was launched on Aug. 1, 1997, and has provided data since Sept. 18, 1997. The SeaWiFS mission is the first NASA Earth Science data purchase in which industry led the development of the full mission.

"Although originally designed to observe the oceans, SeaWiFS provides a unique capability to study the land and atmospheric processes as well," said Dr. Gene Feldman, oceanographer, who heads SeaWiFS' data processing team at Goddard. "As a result, we can monitor changes in the global biosphere with a single sensor over land and ocean."

Among the highlights of SeaWiFS' first continuous year of observation were new insights into the impact of the El Nino climate anomaly on ocean life. SeaWiFS was able to monitor a variety of natural disasters, including fires in Florida, Mexico, Canada, Indonesia and Russia; floods in China; dust storms in the Sahara and Gobi Deserts; and the progress of hurricanes, such as Bonnie and Danielle.

SeaWiFS allowed scientists to witness the ocean transition from El Nino to La Nina conditions in the Equatorial Pacific, specifically around the Galapagos Island. The instrument also allowed researchers to observe the striking speed with which the ocean returned to its pre-El Nino state.

"One of the most fascinating events witnessed in the global ocean was the Spring bloom in the North Atlantic," said Dr. Charles McClain, SeaWiFS project scientist. "While many regions of the ocean experience a spring bloom, the event in the North Atlantic was the most dramatic."

During the winter, storms and surface cooling mix the surface waters of the

Atlantic, replenishing the nutrient supply from the deep, cold, nutrient-rich waters. Once sunlight is sufficient to support plant growth, phytoplankton populations explode and persist for nearly three months until nutrients are depleted. This bloom migrates northward following the Sun throughout the spring and summer.

NASA is leading an international collaboration using SeaWiFS data. More than 800 scientists representing 35 countries already have registered to

use the data. There are over 50 ground stations throughout the world which receive data from the spacecraft. In addition, the unique government-industry partnership with ORBIMAGE, Dulles VA, represents a new way of doing business for NASA.

SeaWiFS is an essential component of NASA's Earth Sciences enterprise, an ongoing effort to study the changing global environment.

Images from this mission are available at URL: <http://seawifs.gsfc.nasa.gov/SEAWIFS.html>



SeaWiFS image of the Chesapeake Bay taken Sept. 19, 1997.

Combined Federal Campaign

It is once again time for the Combined Federal Campaign (CFC). This year's theme is "Create Hope and Opportunity — Reach Out for Love".

CFC Chairperson, Freda Johnson, said a kick-off fair featuring charitable organizations will be held from 10 to 11 a.m. on Oct. 1, in Bldg. E-2. The campaign runs from Oct. 1 to Oct. 31.

Goldin Speaking at SSU

NASA Administrator Daniel Goldin will be the guest speaker at 7:30 p.m., Oct. 7, in Holloway Hall at Salisbury State University (SSU).

Goldin will discuss "Exploration" and how pioneers will "continue to challenge accepted truths, which lead to discoveries we can't even imagine." The presentation is part of SSU's fall lecture series "Beyond 2000: A Journey into the Millennium." Admission is free. The public is invited.

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Rocket Launches

A Terrier-Black Brant sounding rocket was successfully launched and recovered from White Sands Missile Range, NM on Sept. 18. The experiment involved deployment of 11 19-inch diameter, free falling, lightweight aeroshells from an altitude of approximately 171 miles. The experimental objective of this mission was to obtain acceleration, pressure and temperature data on the re-entering experiments. This data will be used to obtain the aerodynamic characteristics of the aeroshells for future analysis of re-entry into the Martian atmosphere. The mission also included three FreeSPACE experiments. The principal investigator was Marcus Murbach, NASA Ames Research Center, and the project manager was Chuck Brodell, Carrier Systems Branch.

An Orbital Sciences Corporation (OSC) Pegasus carrying eight Orbcomm satellites was successfully launched at 1:06 a.m. Eastern Time, Sept. 23. The launch, from an OSC L10-11 aircraft, occurred over the Atlantic Ocean approximately 80 miles off the coast from Wallops Island.

Lockheed Martin Awarded CSOC

NASA has awarded a \$3.44 billion contract to Lockheed Martin Space Operations Co., Houston, TX, to manage the Agency's space operations activities.

The Consolidated Space Operations contractor will manage NASA's data collection, telemetry and communication operations supporting its Earth-orbiting satellites, planetary exploration, and human space flight activities. The contract shifts management responsibility from five NASA centers to a single entity.

The basic contract amounts to \$1.90 billion for a duration of five years, including a three-month phase-in period. The contract runs from October 1998 to December 2003. The award also contains options totaling \$1.54 billion, which includes a five-year extension of the basic effort (January 2004 through December 2008); additional options for work at the Kennedy Space Center, FL; and enhanced mission and data service support to the International Space Station program.

The work will be performed at five NASA locations including the Goddard Space Flight Center, Greenbelt and Wallops.

**NASA Visitor Center
October Special Events**

October 3 — “Model Rocket Launch”
A model rocket launch will be held at 1 p.m. Models of various rockets will be launched. Model rocketeers are invited to bring their own rockets and launch them. The launch will be canceled if it is raining or winds exceed 18 mph.

October 17 — “Balloon Rocketry”
Rocketry is the subject of a 1 p.m. program for children 5 to 10 years of age. The 40-minute activity will introduce the history and principles of rockets and how they fly. The children will be given the opportunity to fly their own balloon rockets.

“Puppets in Space”
A 10-minute puppet show will be presented at the Visitor Center on Saturdays and Sundays at 11 a.m. Puppet astronauts and Sam the monkey will explore space flight, including the space suit. An eight-minute version of the film “Astrosmites” follows the puppet show.

Saturdays and Sundays — In recognition of NASA’s 40th Anniversary, historical films on NASA and the Wallops Flight Facility will be shown on the hour.



Sundays — “Humans in Space” is the subject of a 1 p.m. program for children of all ages. The 30-minute program looks at living and working in space, including a review of the astronauts’ culinary delights and their wardrobe. The program is followed by a hands-on children’s activity. Children will be given the opportunity to create their own “space helmet”.

“Space Ace” — Children 5 to 10 years of age can earn a “Space Ace” certificate and a lithograph during their Visitor Center visit by completing an activity sheet.

The Visitor Center is open Thursday through Monday from 10 a.m. to 4 p.m. and closed on Tuesday and Wednesday. Admission to all Visitor Center programs is free. For further information, call (757) 824-2298.

For Sale
Baldwin Piano. Excellent Condition.
\$1,000. Call 757 336-5610.



**Steak Dinner
October 9
6 p.m.
Building F-3**

\$15 per ticket. Sales will be limited to 75 tickets. Call Jan Neville, x1526 or Bev Hall, x1714.



FCI Leo Matthews, AEGIS, talks to visitors at the Wallops exhibit.

The Eastern Shore region was featured in the Virginia Regional Showcase Building at the Virginia State Fair, Sept. 26 and 27. Bobby Flowers (Sounding Rocket Program Office) and Betty Flowers (Public Affairs Office) were assisted by Navy personnel from AEGIS Combat Systems Center in staffing an exhibit which featured the Wallops partners. Approximately 20,000 people visited the Showcase Building during the two days.

**Federal Women’s Day to be Observed
October 6, 1998**

Training requests can still be submitted for the following presentations during Federal Women’s Day, Oct. 6. Training sessions are open to all Wallops employees.

**Communications Management:
Effective Communication at
Work and at Home**

Robin Holloway
9 a.m. - 11 a.m.
Bldg. E-104



This seminar will provide participants with skills necessary to more effectively influence others in positive, constructive ways to ensure high quality agreements and effective working relationships.

**New Director for Marshall
Space Flight Center**

Arthur G. Stephenson, President of Oceaneering Advanced Technologies, Houston, TX, has been named the next Director of NASA’s Marshall Space Flight Center, Huntsville, AL. Stephenson has over 30 years’ experience as a manager in spacecraft and high technology systems.

Since 1992, Stephenson has been a senior official with Oceaneering International. Prior to that, he worked for TRW, Redondo Beach, CA, for 28 years, and last served there as Director, Space Transportation and Servicing Advanced Programs.

Stephenson holds a B.S. in electrical engineering from the University of Redlands. He is a senior member of the American Institute of Aeronautics and Astronautics.

**Living Harmoniously in a Crazy
World**

Marcia Ann George
1:30 p.m. - 3:30 p.m.
Bldg. E-104

Learn the ground rules for living and working in this sometimes “crazy” world and how to successfully navigate and chart your life’s course with emphasis on personal responsibility while maintaining a sense of our own special gifts.

Training requests are required. The funding organization is Code 120. Code 800 training requests should be sent to Sherry Kleckner, Bldg. F-6. All other codes can fax their requests to Laura Potler, x66-1679. Contractors should submit a letter from their supervisor on company letterhead to Laura Potler.

For further information contact Pat Pruitt, x1145 or Kelly Long, x1905.

**Blood Drive
for the
Eastern Shore
Blood Bank**



**October 6, 1998
Building F-3**

Call Robyn Griffin, x2309 or Linda Layton, x1561 to schedule an appointment.

Upcoming MAC Events

October 17 - Octoberfest

October 30 - Halloween Party

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